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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/253,810	02/19/99	BRUNER	J 21.530-B-USA
		IM22/0131	EXAMINER
			TUSKA, C.
			ART UNIT
			PAPER NUMBER
		1771	7
		DATE MAILED:	
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Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

**Office Action Summary**

Application No. 09/253,810	Applicant(s) Bruner
Examiner Cheryl Juska	Group Art Unit 1771

Responsive to communication(s) filed on Nov 13, 2000

This action is FINAL.

Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle 35 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

**Disposition of Claim**

- Claim(s) 12-17 is/are pending in the application.  
Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 Claim(s) \_\_\_\_\_ is/are allowed.  
 Claim(s) 12-17 is/are rejected.  
 Claim(s) \_\_\_\_\_ is/are objected to.  
 Claims \_\_\_\_\_ are subject to restriction or election requirement.

**Application Papers**

- See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.  
 The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.  
 The proposed drawing correction, filed on \_\_\_\_\_ is  approved  disapproved.  
 The specification is objected to by the Examiner.  
 The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. § 119**

- Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).  
 All  Some\*  None of the CERTIFIED copies of the priority documents have been received.  
 received in Application No. (Series Code/Serial Number) \_\_\_\_\_.  
 received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\*Certified copies not received: \_\_\_\_\_

- Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

**Attachment(s)**

- Notice of References Cited, PTO-892  
 Information Disclosure Statement(s), PTO-1449, Paper No(s). 4  
 Interview Summary, PTO-413  
 Notice of Draftsperson's Patent Drawing Review, PTO-948  
 Notice of Informal Patent Application, PTO-152

— SEE OFFICE ACTION ON THE FOLLOWING PAGES —

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## DETAILED ACTION

### *Election/Restriction*

1. Applicant's election without traverse of claims 12-17 in Paper No. 6 filed on November 13, 2000, is acknowledged.

### *Response to Amendment*

2. Amendment A, submitted with Paper No. 6, has been entered. Claims 1-11 have been cancelled as requested.

### *Claim Rejections - 35 USC § 112*

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 12-17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

5. Claim 12 is indefinite for use of the phrase "an arrangement of fibers and composite yarns" wherein said yarn has a sheath and core component. Are the 'fibers' part of said composite yarn? Or, are said fibers in addition to said yarn? Also, is Applicant describing a composite monofilament with a sheath/core configuration (i.e., a bicomponent filament)? Or, is Applicant

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intending to limit the ‘composite yarn’ to being more than one filament, wherein a mono- or multifilament is wrapped with another mono- or multifilament?

6. Claims 15 and 17 are indefinite for the use of “conventional fibers” and “conventional yarns,” respectively. What is it about said fibers and yarns that makes them conventional? It is unclear what the scope is of the term “conventional.”

7. Claim 12 is indefinite for the use of the phrase “forming an arrangement of fibers and composite yarns.” As written, the claim encompasses ‘arranging’ fibers and yarns on a tabletop wherein said fibers and yarns are not even touching. The claim does not positively recite that said fibers and yarns are arranged *into a fabric*. (Note claim 17 is not similarly rejected in that the yarns are defined as warp, filling, and pile yarns, which inherently implies a fabric construction.)

8. Claim 17 recites the limitation “the arrangement of fibers and composite yarns” in line 13. There is insufficient antecedent basis for this limitation in the claim. Claim 17 comprises an arrangement of composite and conventional yarns, but not fibers.

#### ***Claim Rejections - 35 USC § 102***

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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10. Claims 12-5 and 17 are rejected under 35 U.S.C. 102(b) as being anticipated by JP 06-2240 issued to Imose. (At this time, only abstract translations are provided. However, a full translation will be provided with the next Office Action.)

Claim 12 is drawn to a method of making a composite fabric comprising the steps of (a) forming an arrangement of fibers and composite yarns wherein the composite yarns comprise an elastomeric core and an elastomeric thermoplastic sheath disposed about the core wherein the melting point temperature of the sheath is at least about 10°C lower than the melting point temperature of the core, (b) heating the arrangement to a temperature above that of the melting point temperature of the sheath but below that of the melting point temperature of the core; and (c) cooling the composite fabric. Claim 13 limits the melting point temperature difference between the sheath and core to a range of 50-75°C. Claim 14 limits the forming step to comprise weaving. Claim 15 limits the forming step to comprise pile weaving whereby ground warp yarns and filling yarns comprising the composite yarns are interlaced with a pile of conventional fibers. Independent claim 17 is a combination of the limitations of claims 12, 13, and 15.

Imose discloses a pile woven upholstery fabric comprised of a base fabric and pile yarns woven into said base and bonded thereto. The base fabric is comprised of composite sheath-core yarns, wherein the sheath is partially comprised of a thermally fusible fiber (both abstract). Said thermally fusible fiber has a melting point temperature which is at least 50°C less than the non-thermally fusible core component (Derwent abstract). Upon melting of the fusible fiber of the sheath, the pile yarns are bonded to the base fabric.

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Thus, Imose teaches Applicant's limitations of weaving ground and fill sheath-core yarns with conventional pile yarns to form a pile fabric and melting the lower melting point sheath component to fix said pile thereto. With respect to Applicant's limitation of a cooling step, it is asserted that, despite Imose's lack of an explicit teaching thereto, said step is inherent to the invention disclosed. Specifically, upon the removal of heat, cooling back to room, or starting, temperature is inherent.

With respect to Applicant's limitation that the sheath and core components are elastomeric, it is asserted that the yarn being elastomeric does not affect the method steps in a manipulative sense. The process steps are the same whether said yarn is elastomeric or not. It has been held that to be entitled to weight in method claims, the recited structure limitations therein must affect the method in a manipulative sense, and not to amount to the mere claiming of a use of a particular structure. *Ex parte Pfeiffer*, 135 USPQ 31 (1961). Therefore, claims 12-15 and 17 are rejected as being anticipated by the cited Imose disclosure.

***Claim Rejections - 35 USC § 103***

11. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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12. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over the cited Imose reference in view of *Woven Pile Fabrics in the Automotive Industry*, Moulin and Van De Wiele.

Claim 16 limits the pile to being interlaced in a “V” or “W” configuration so that the pile is wrapped around either one or three composite yarns of the ground warp yarns or the filling yarns or both.

Although the abstract translations of the cited Imose reference do not explicitly teach the pile weave in a “V” or “W” configuration, it is asserted that said configurations are well-known in the art of pile woven fabrics. In fact, it is asserted that said configurations are the two basic configurations for pile weaves. Specifically, the pile yarns are either woven around one yarn in a “V” configuration or around three yarns in a “W” configuration. For example, the cited Moulin publication describes both weave configurations in Figures 4 and 5. Hence, it would have been obvious to one of ordinary skill in the art to employ either one of the claimed weave configurations, in that said configurations are well-known in the art as a matter of design choice for pile woven fabrics. Therefore, claim 16 is rejected as being obvious over the cited references.

### *Conclusion*

13. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Cheryl Juska whose telephone number is (703) 305-4472. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris, can be

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reached at (703) 308-2414. The official fax number for this TC 1700 is (703) 872-9310 and, for  
After Final communications, (703) 872-9311.



CHERYL JUSKA  
PATENT EXAMINER

cj

January 26, 2001